

Figure 1A

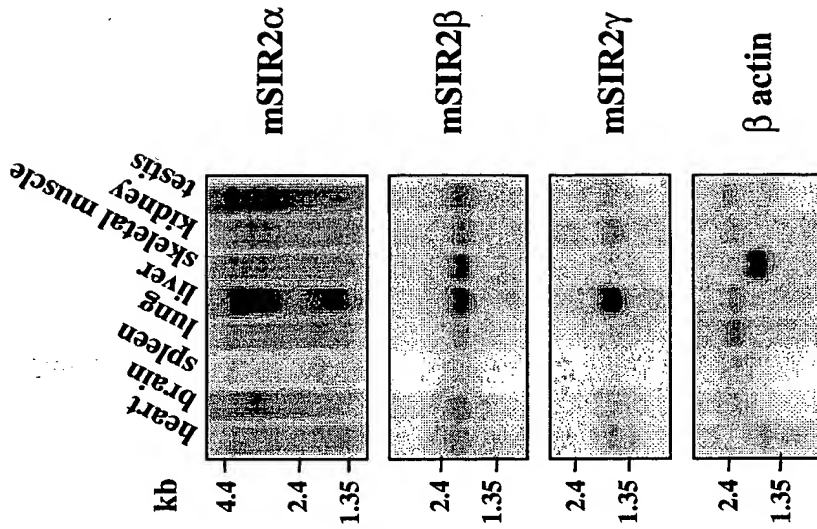
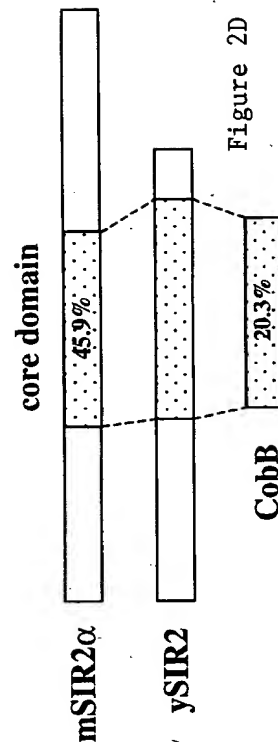


Figure 1B

Figure 2C



1	MADEVA	LALQ	AAGSPS	AAAA	MEAS	OP	ADEP	LKR	PRRD	
41	PGLRS	PGE	SA	AVAP	AAAG	CEAS	AA	PAAL	LWRE	AAGAA
81	ASARE	APAT	AVAG	DONG	SG	LR	PRE	AA	DD	DDDEGE
121	DEAAAA	AAAA	I	GY	RN	LL	T	DG	LL	TNGFHS
161	SHASS	DW	TP	PR	I	GY	TV	FQ	QH	LM
201	TIPPE	LO	DM	T	LQ	W	I	V	I	N
241	LLOECK	KI	I	V	L	T	GAG	V	S	VG
281	DLDPQ	AM	F	I	E	Y	R	K	D	P
321	FIALSD	K	E	G	K	L	L	R	N	Y
361	ASCL	I	C	K	Y	K	V	D	E	A
401	PEI	V	F	F	G	E	N	L	P	E
441	ALIP	S	I	P	H	E	V	P	O	I
481	LCH	R	L	G	E	Y	A	K	L	C
521	PTP	L	H	I	S	E	D	S	S	P
561	V	S	E	S	C	V	E	E	K	P
601	NERT	S	V	A	E	T	V	R	K	W
641	I	F	H	G	A	E	V	S	D	E
681	D	E	S	E	I	E	F	Y	N	G
721	I	A	T	R	Q	E	L	T	O	V

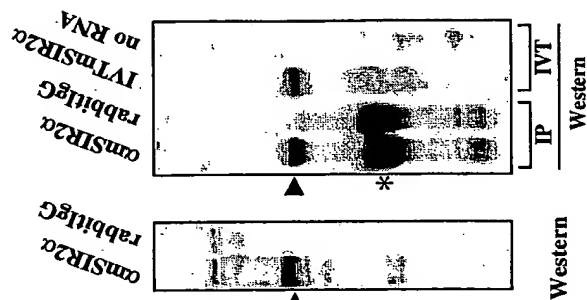
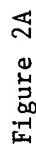


Figure 2B

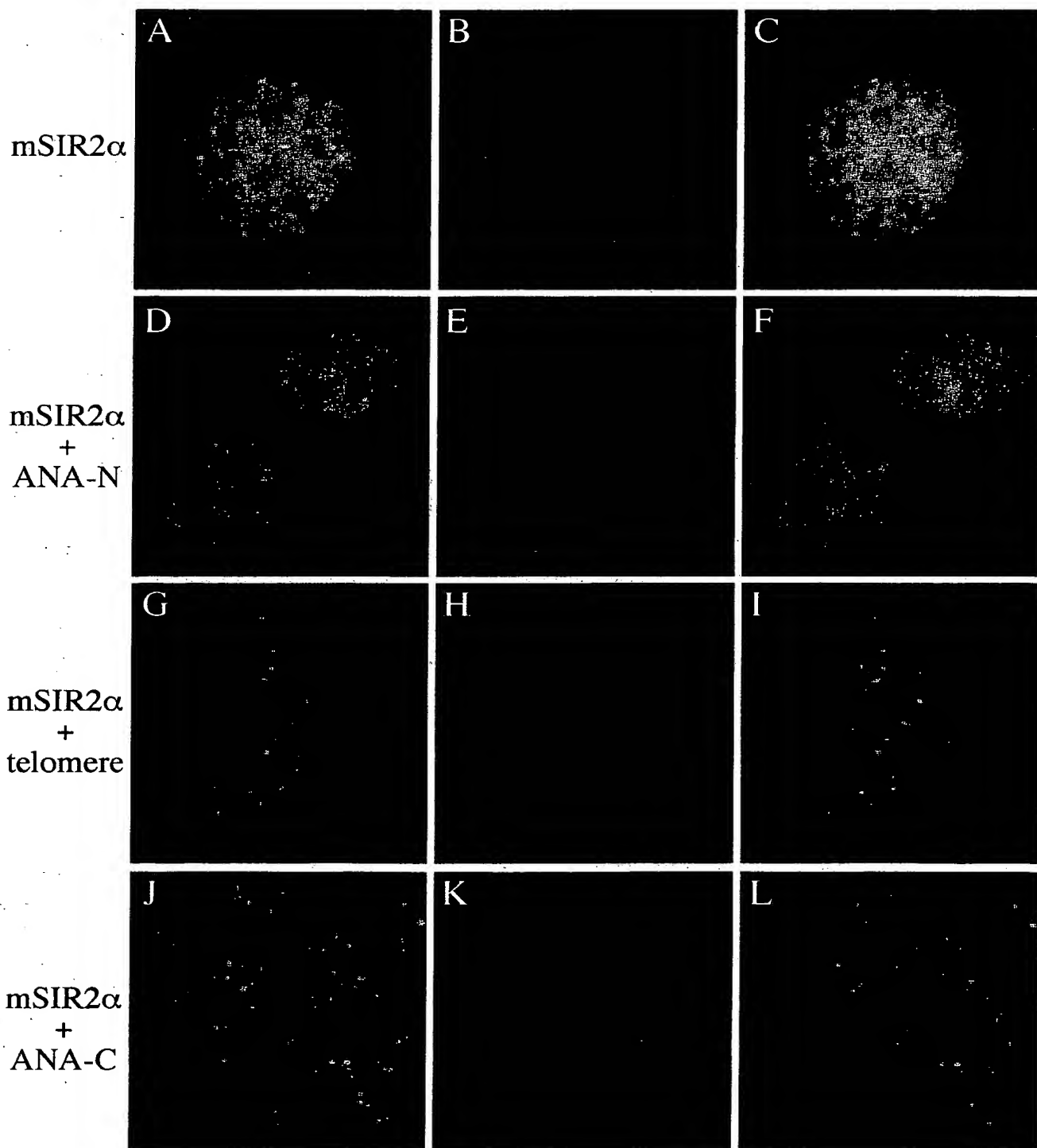


Figure 3

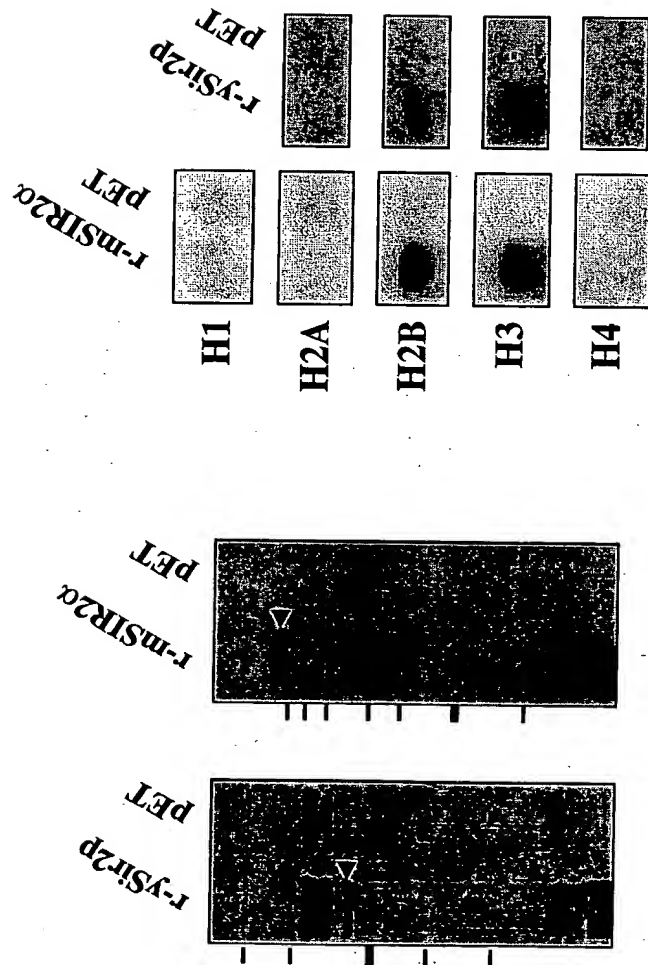


Figure 4A

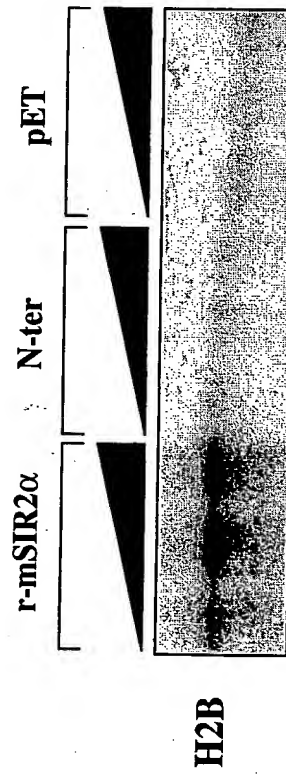


Figure 4B

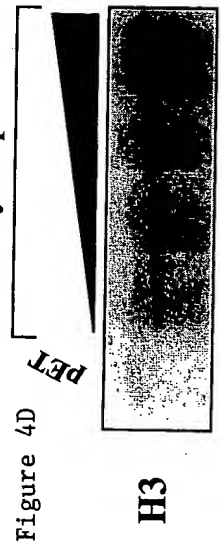


Figure 4C

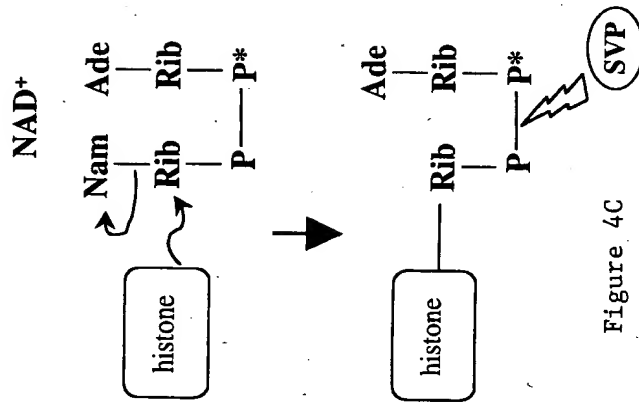


Figure 4D

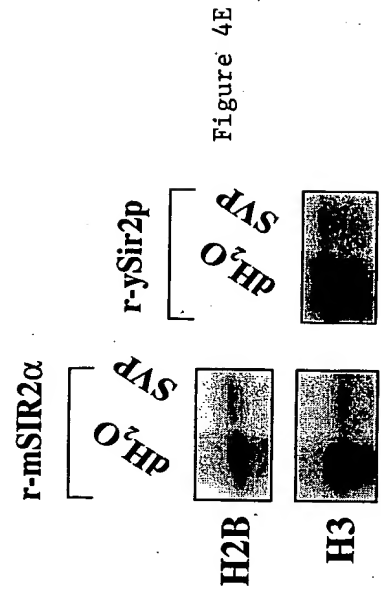


Figure 4E

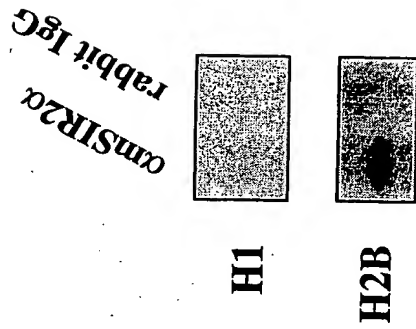


Figure 4G

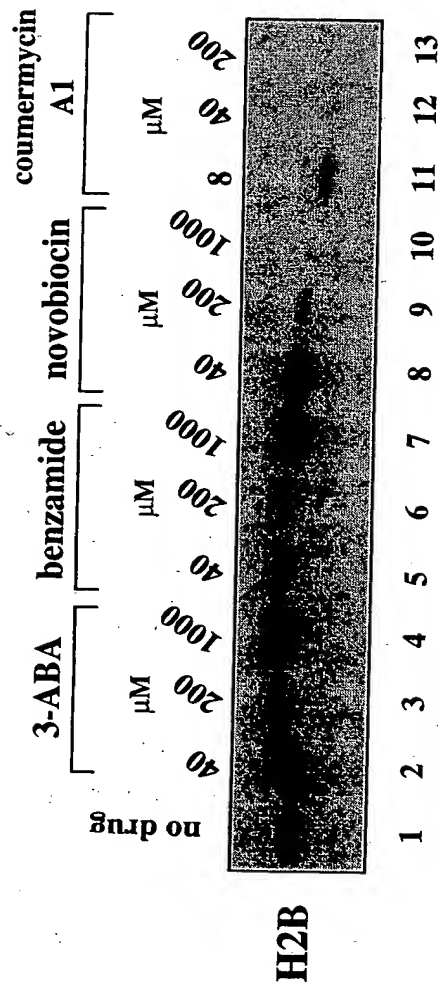


Figure 4F

201040-98/55/60

201040 " 98/SE/60

H3

unAc * * *
 diAc ARTKQTARKSTGGKAPRKQLC

H4

 * * * * *
 monoAc SGRGKGGKGLGKGGAKRHRC 5 8 12 16
 tetraAc AGGKGGKGMGVGAKRHSC * * * *

Figure 5A

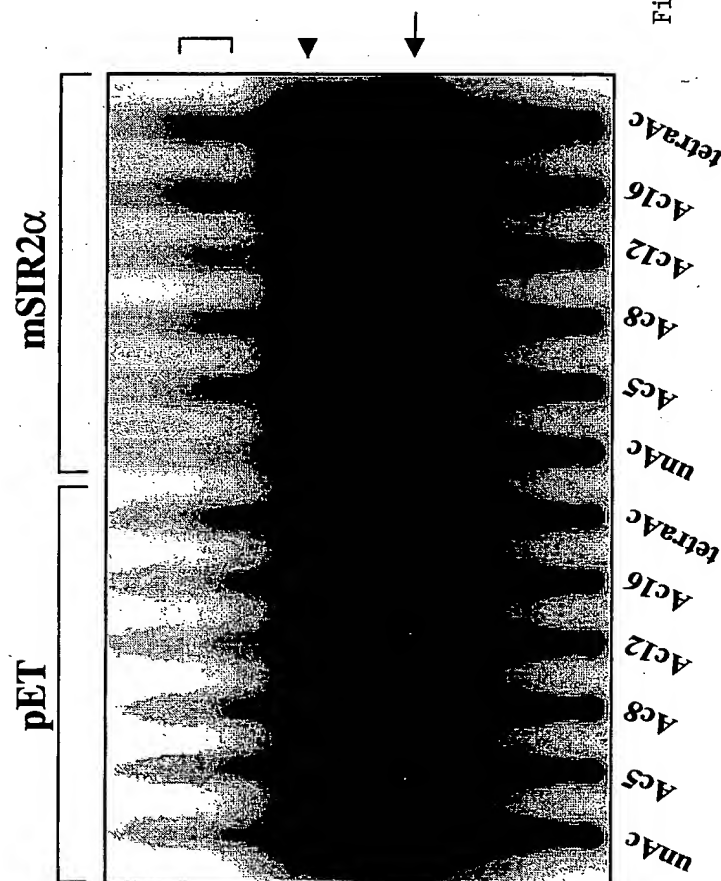


Figure 5C

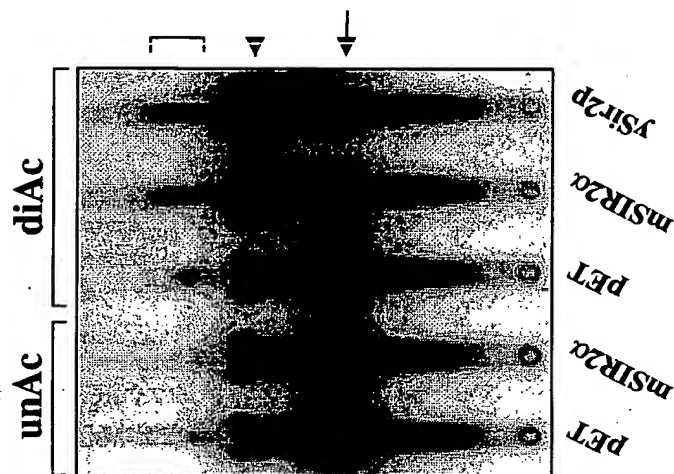


Figure 5B

201040-98/58/60

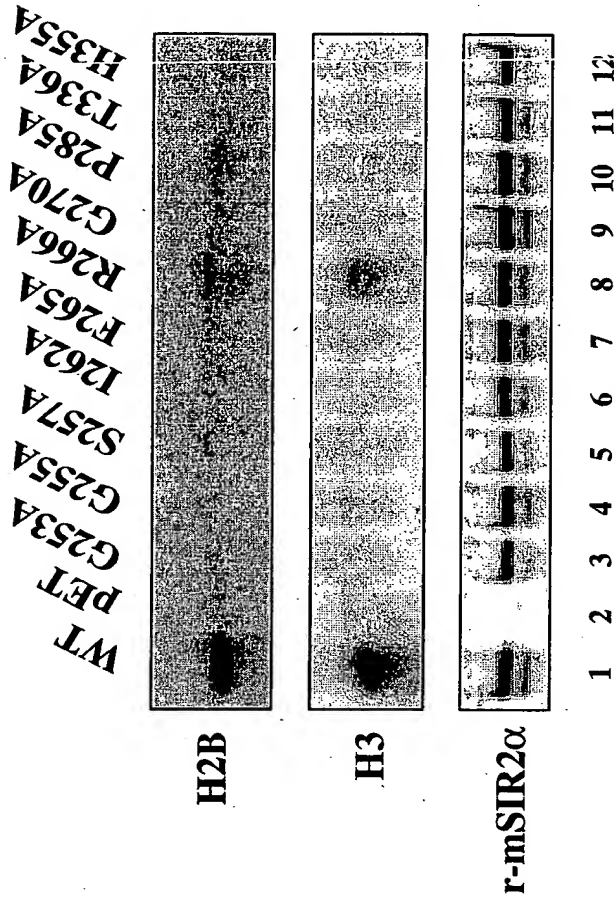


Figure 6B

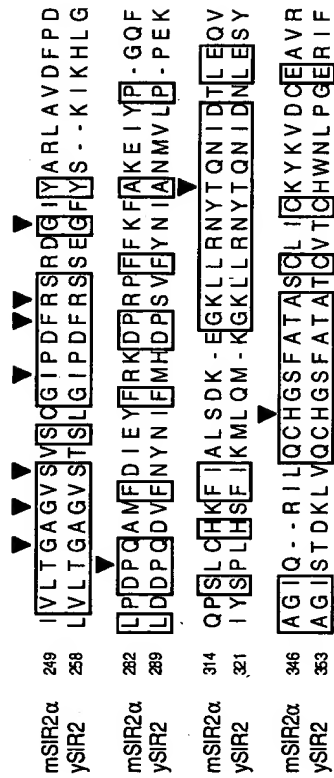


Figure 6A

2010-09-28/55/60

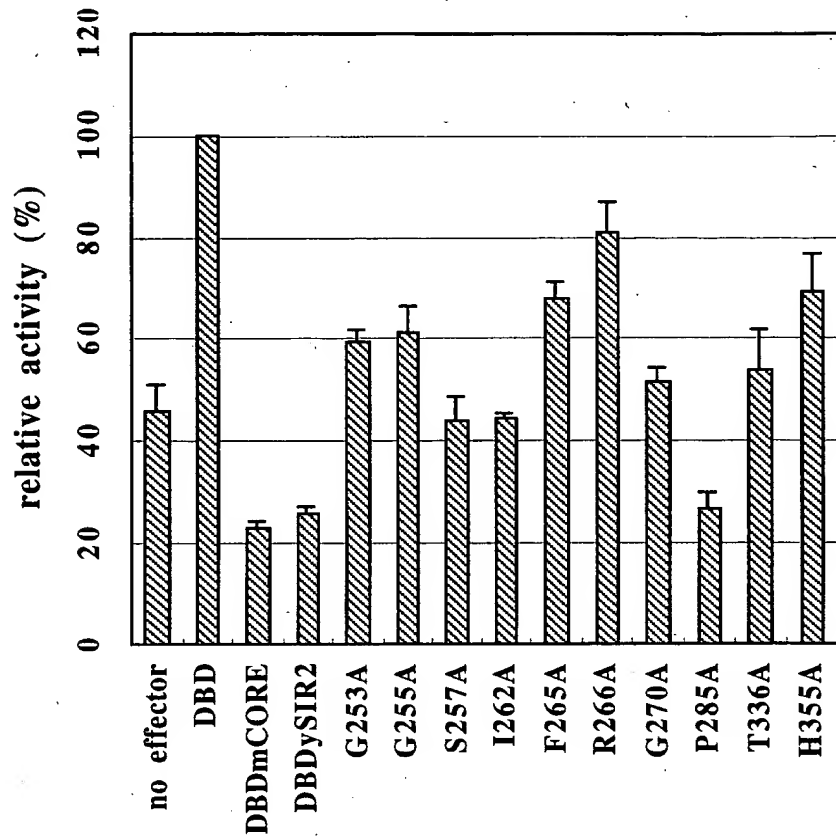


Figure 6D

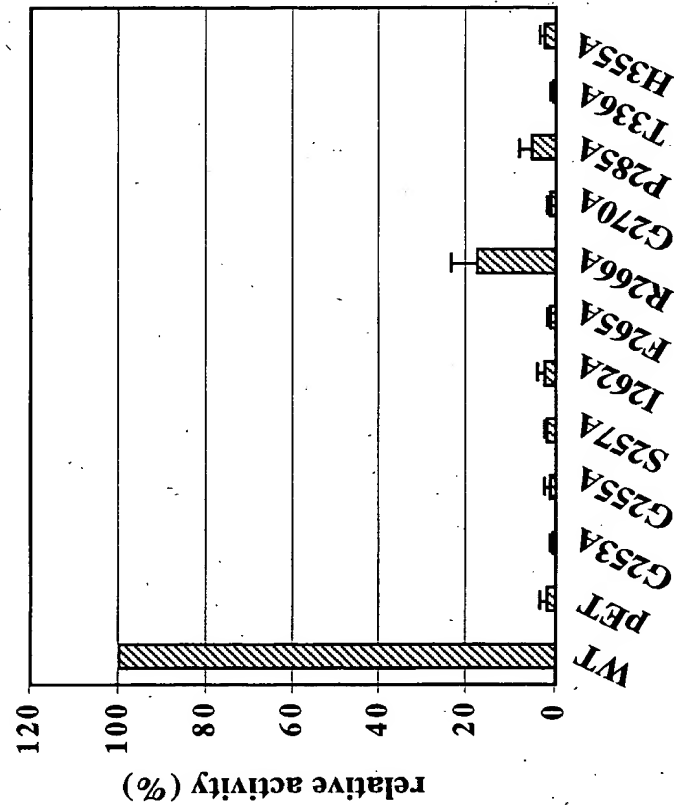


Figure 6C

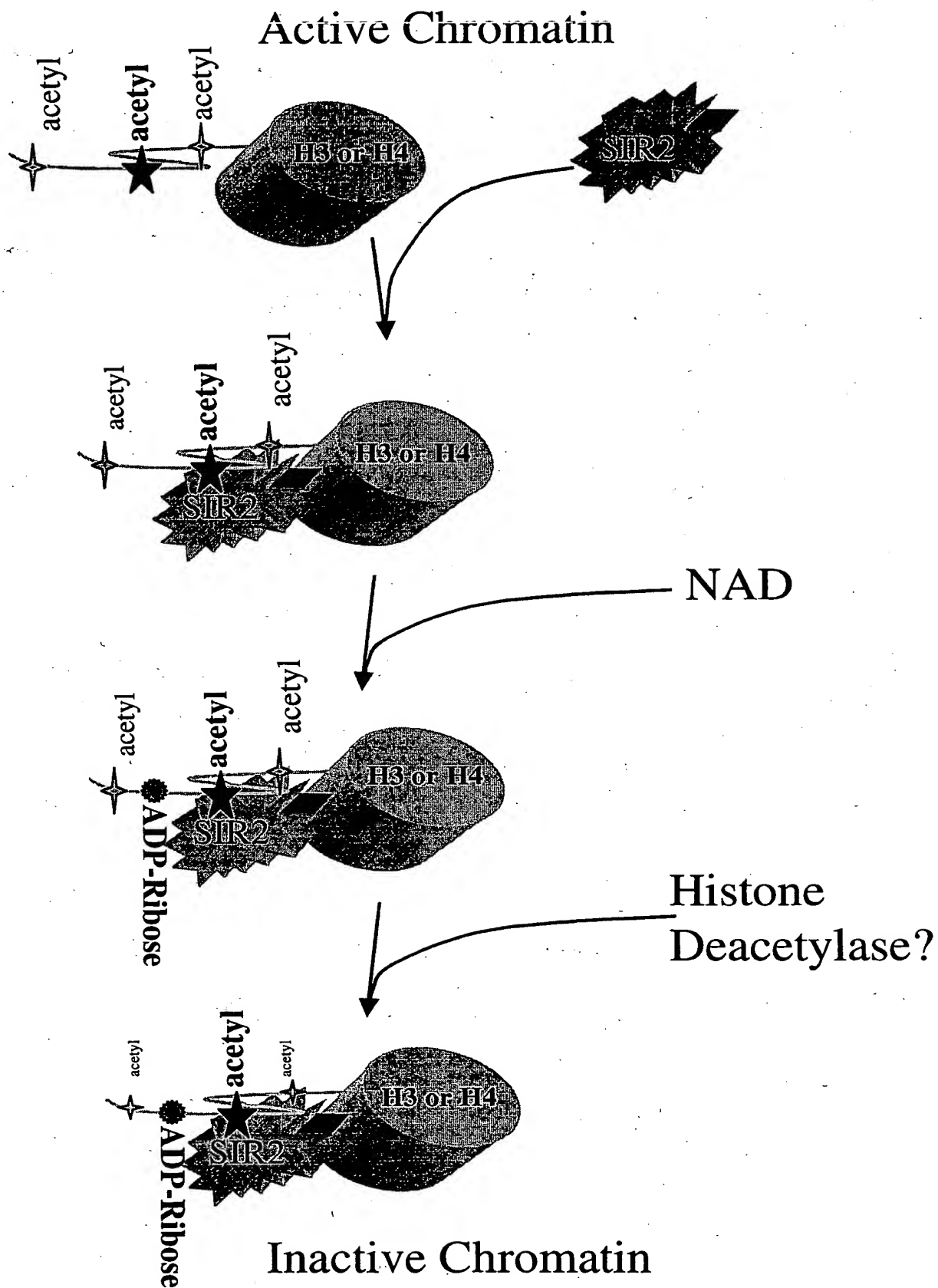


Figure 7

09735786-040102

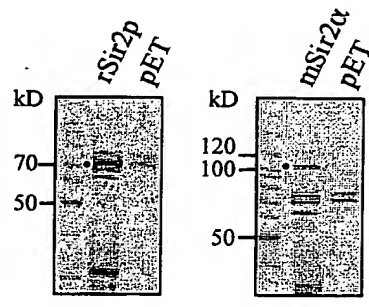


Figure 8a

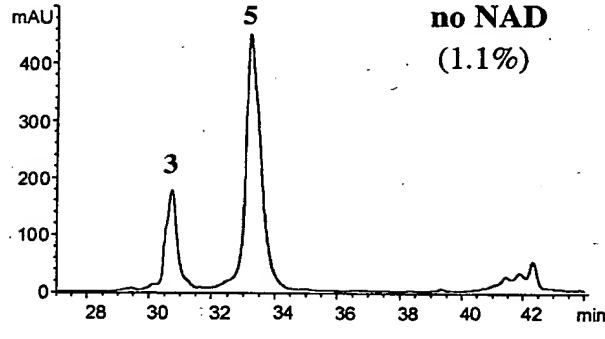


Figure 8b

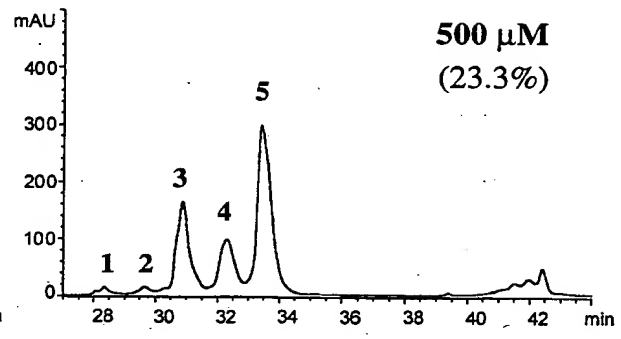


Figure 8e

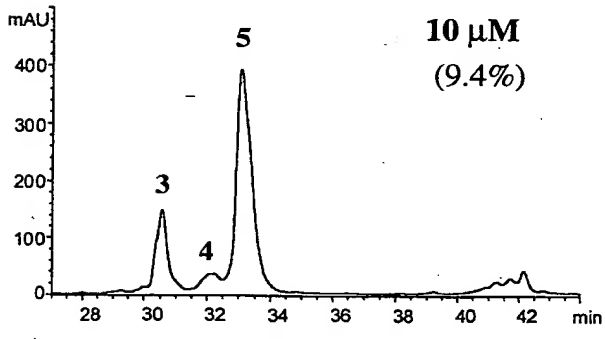


Figure 8c

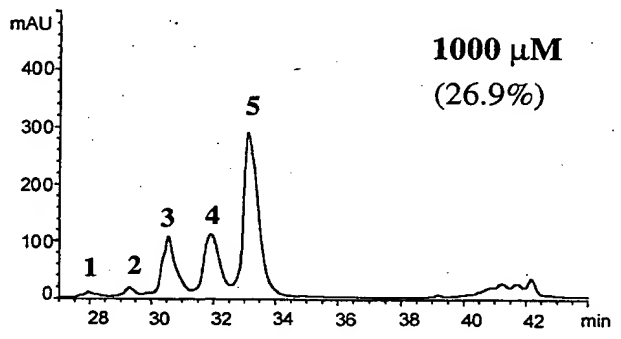


Figure 8f

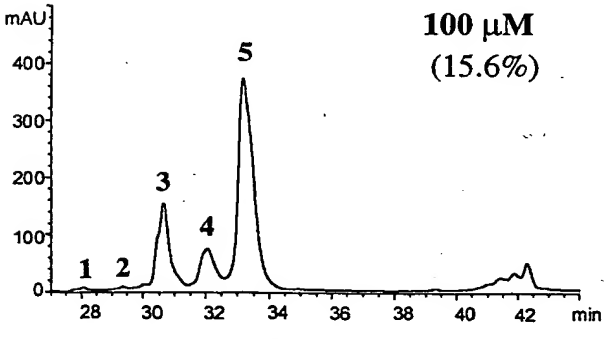


Figure 8d

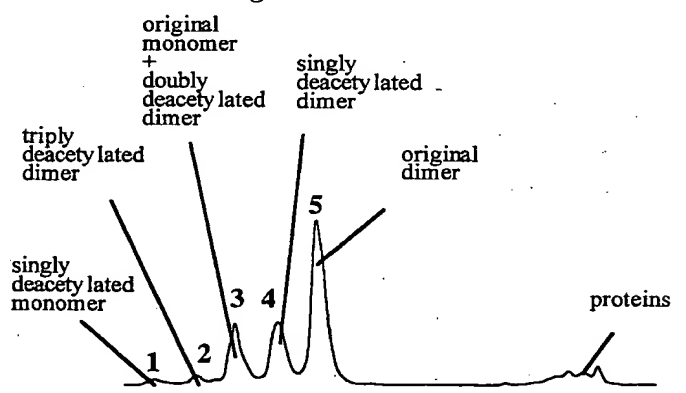


Figure 8g

09/735,786-040102

Figure 9a

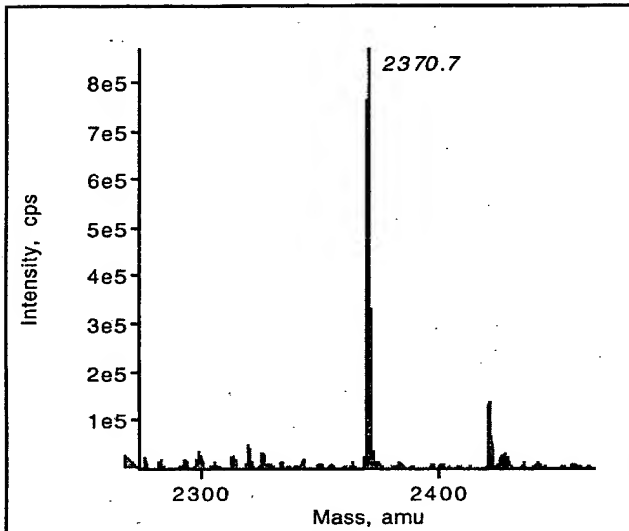


Figure 9b

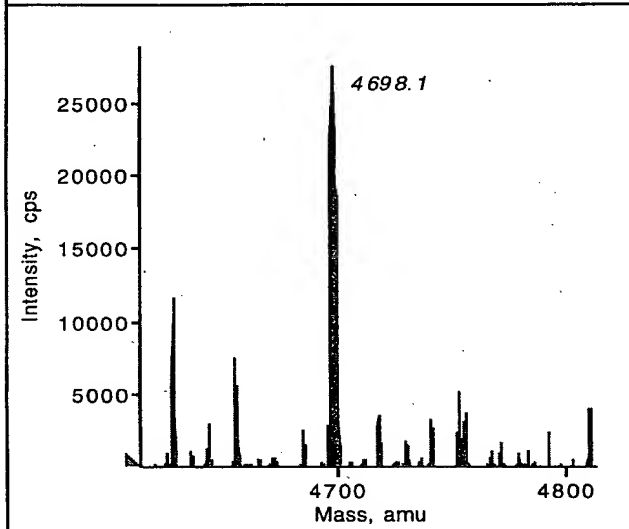
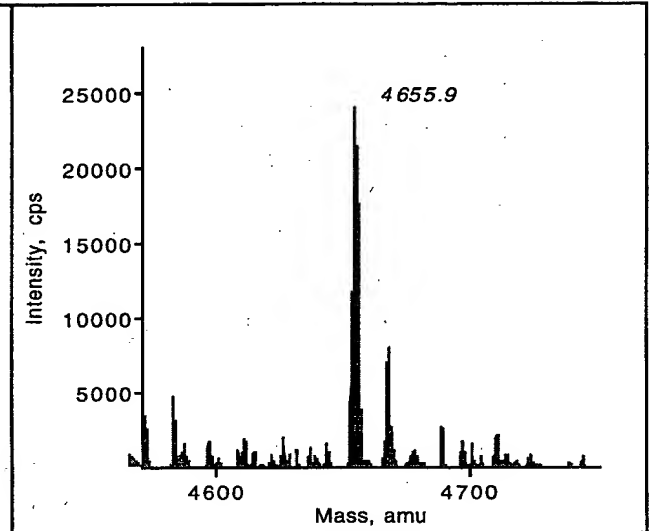


Figure 9c

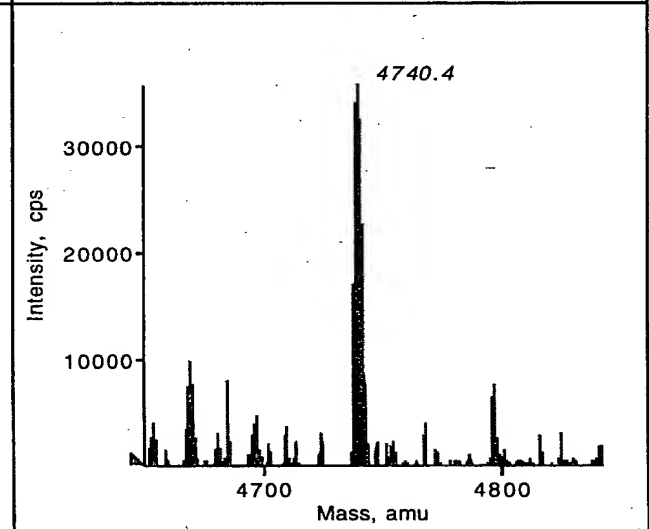


Figure 9d

09/35/86-04010

peak 4

peak 5

9

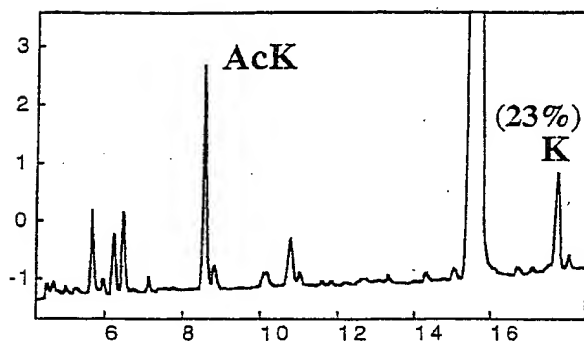


Figure 10a

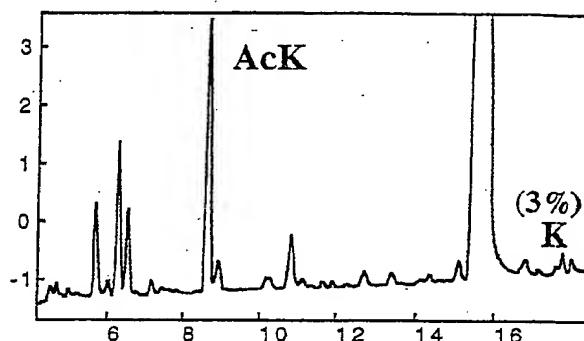


Figure 10d

14

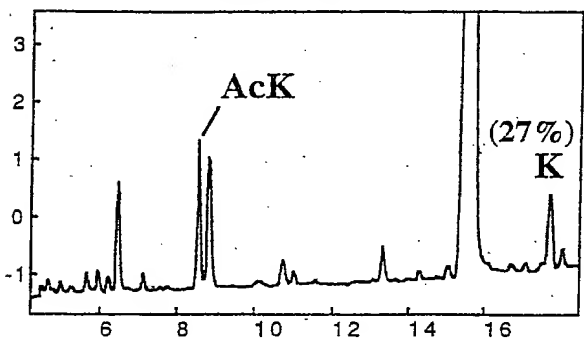


Figure 10b

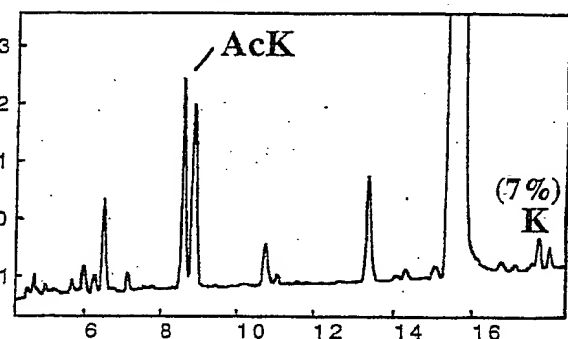


Figure 10e

18

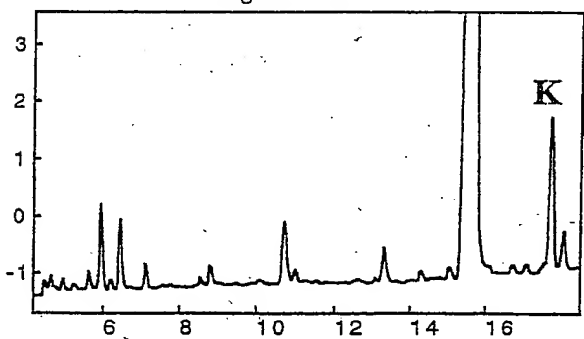


Figure 10c

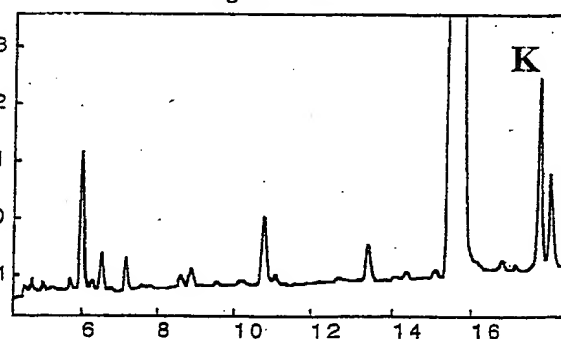


Figure 10f

09/35/86-040102

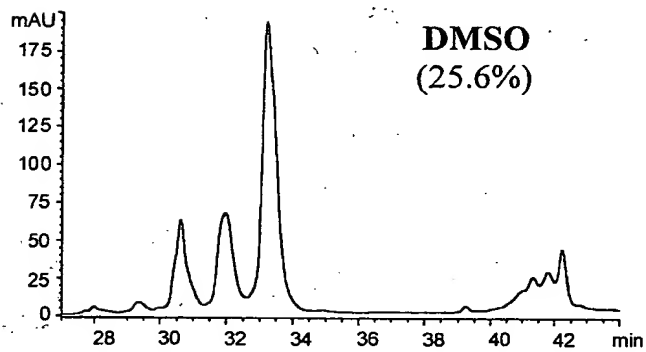


Figure 11a

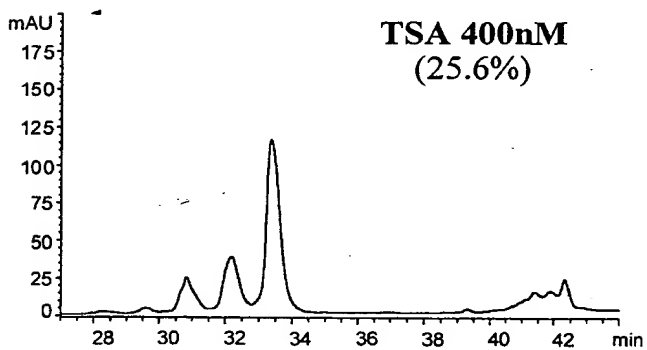


Figure 11b

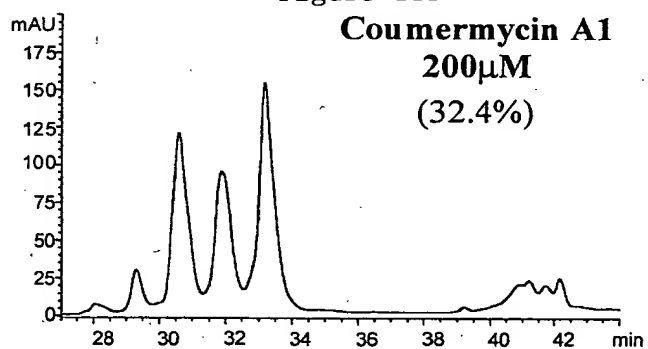


Figure 11e

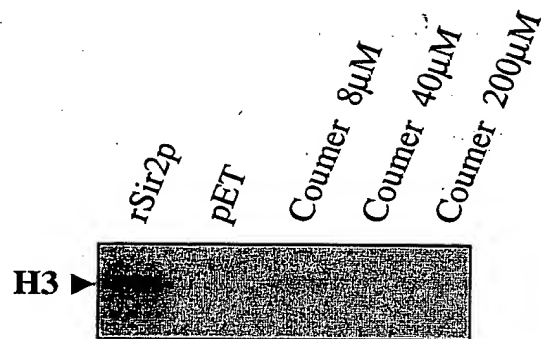


Figure 11c

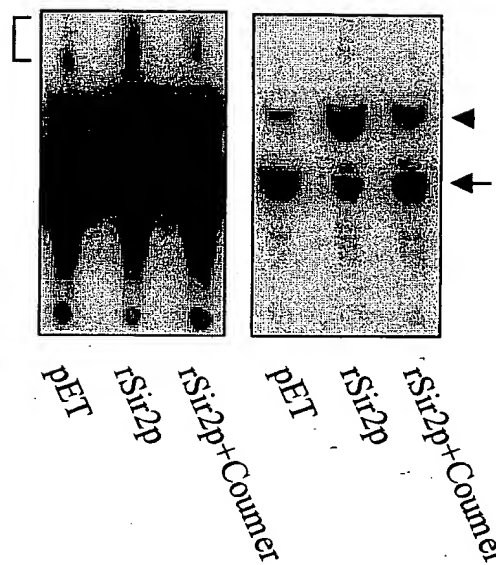


Figure 11d

09/735,786-040102

2010-09-28/58/60

1 MADEVALALQAAAGSPAAAAAMEAASQPADEPLRKRPRRDG
41 PGLGRSPGEPAAVAPAAAGCEAAASAAAPAAALWREAAGAA
81 ASAREAPATAVAGDGNGLRREPRAAADDFDDDEGE
121 DEAAAAAAAI GYRDNLLT DGLLTNGFHSCESDDDRT
161 SHASSDWTTPRPRI GPYTFVQQHLMIGTDPRTI LKDLLPE
201 TIPRPELDDMTLWQIVINI LSEPPKRRKKRDINTIEDAVK
241 LLOECKKIIVLTGAGVSVSCGIPDFRSRDGIYARLAVDFP
281 DLPDPQAMFDEYFRKDPFPFKFAKEIYPGQFQPSLCHK
321 FIALSDKEGKLLRNYTONIDTLEQVAGIQRI LQCHGSFAT
361 ASCLICKYKVDCEAVRGDIFNQVPRCPADPEPLAIMK
401 PEIVFFGENLPEOFHRAWKYDKDEVLLIVIGSSLKVRPV
441 ALIPSSIPHEVPQILINREPLPHLHFDVE LLGDCDVIINE
481 LCHRLGGEYAKLCCNPVKLSEITEKPPRQKELVHLSELP
521 PTPLHISEDSSPERTVPQDSSVIATLVDQATNNVNDLE
561 VSESSCVEEKPOEVQTSRNVENINVENPDFKAVGSSADK
601 NERTSVAETVRKQWPNRLAKEQISKRLEGNQYLFVPPNRY
641 IFHGAEVYSDSEDDVLSSSSCGNSDSGTCSQPSLEEPLE
681 DESEIEEFYNGLEDTERPECAGSGFGADGGDQEVVNEA
721 IATRQELTDVNPSPDKS

Figure 12a

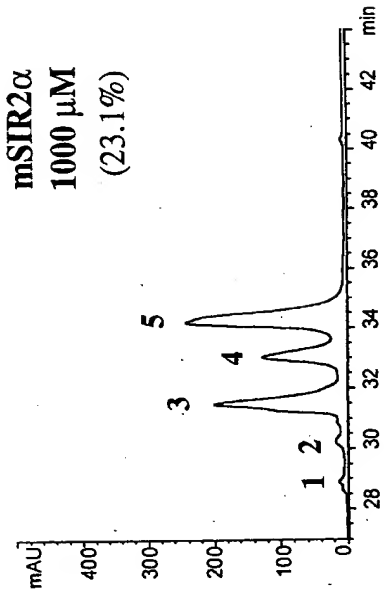


Figure 12c

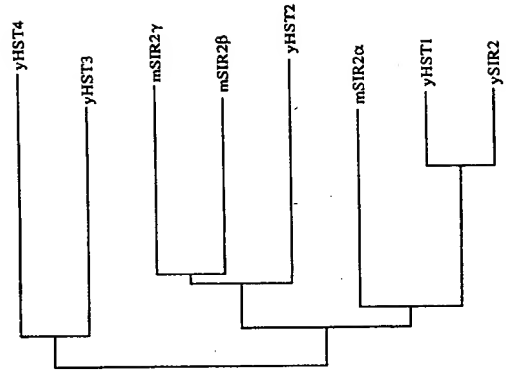


Figure 12b

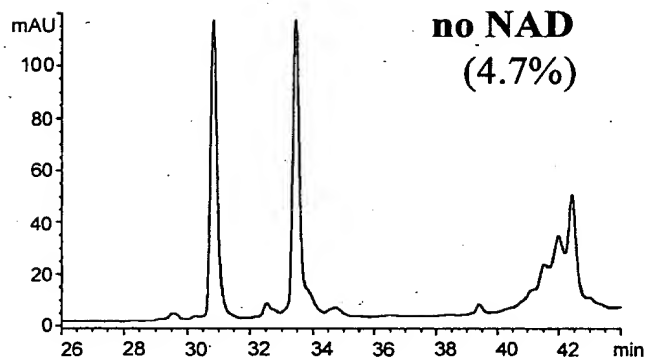


Figure 13a

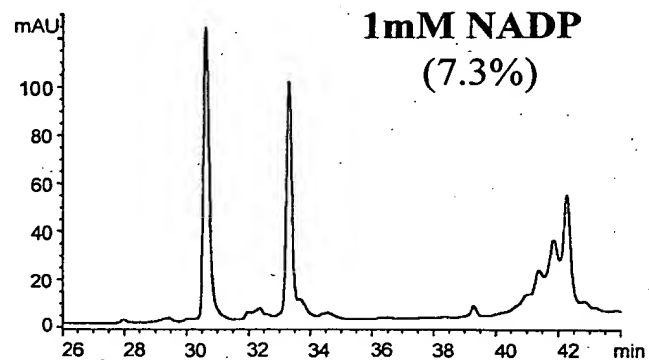


Figure 13d

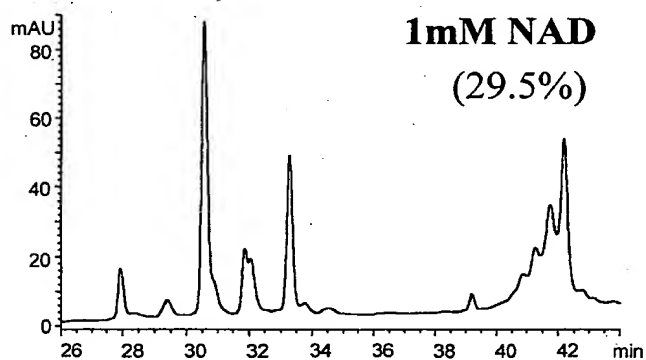


Figure 13b

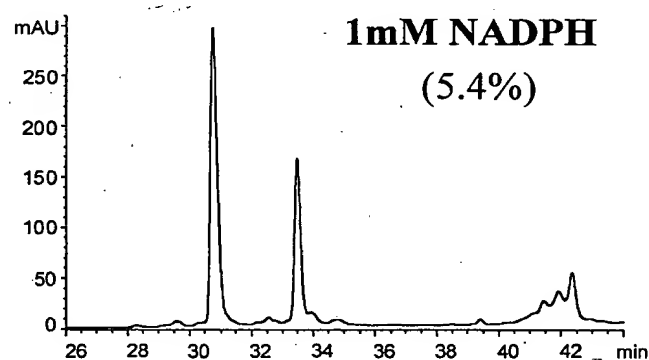


Figure 13e

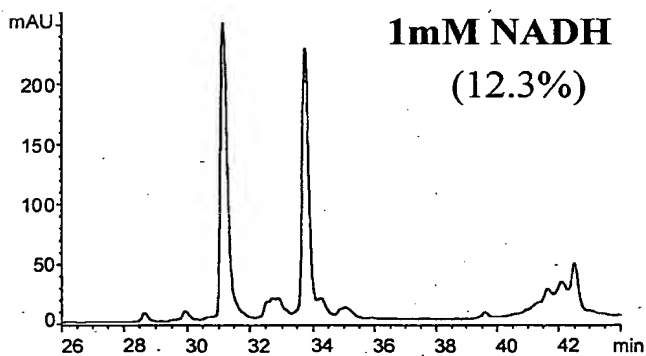
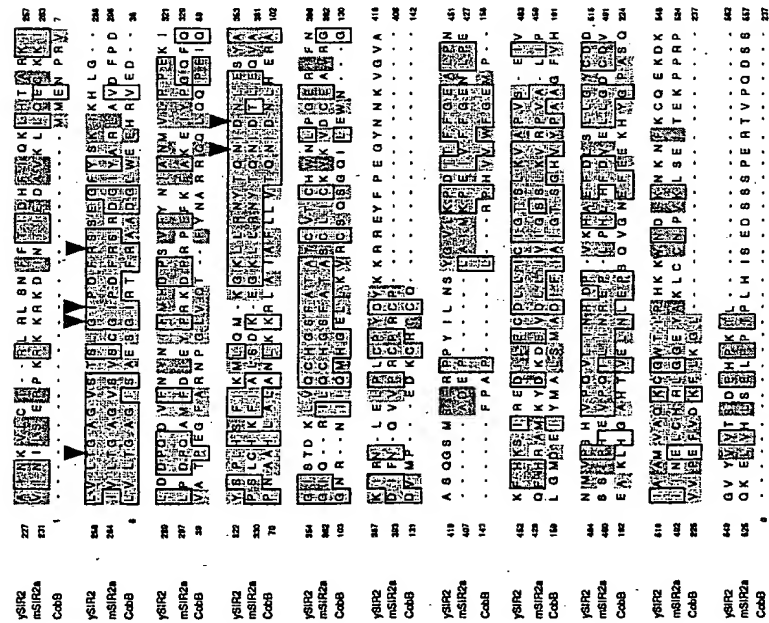


Figure 13c



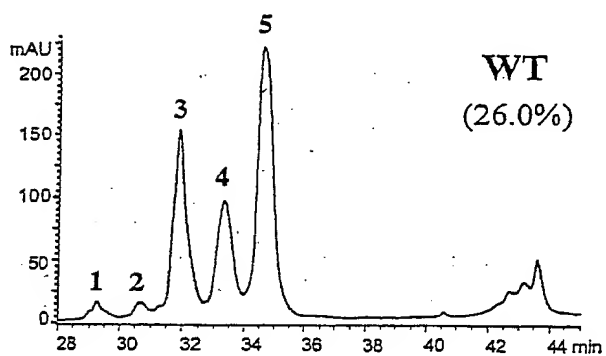


Figure 15a

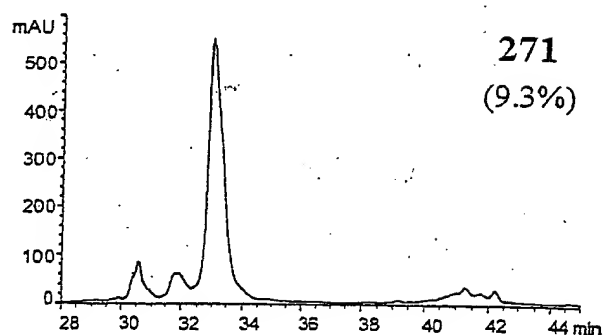


Figure 15e

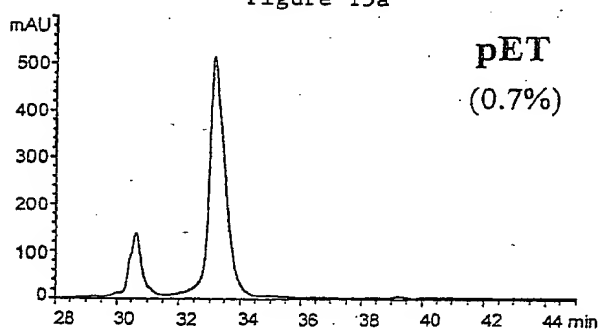


Figure 15b

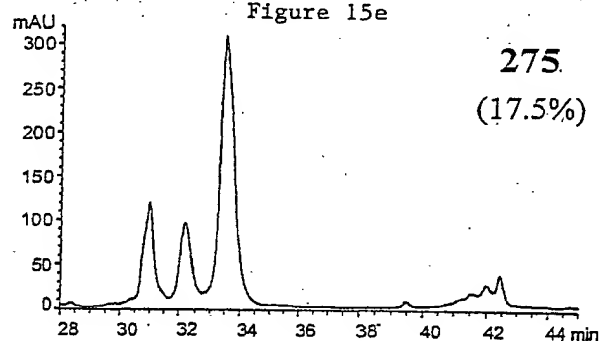


Figure 15f

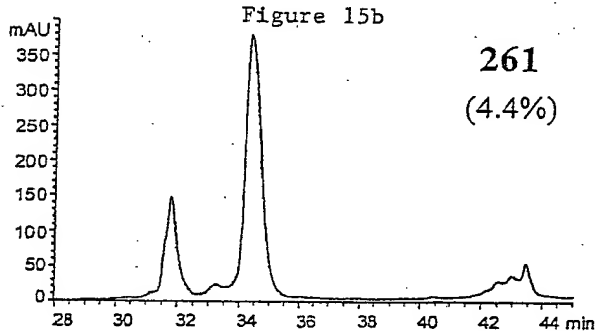


Figure 15c

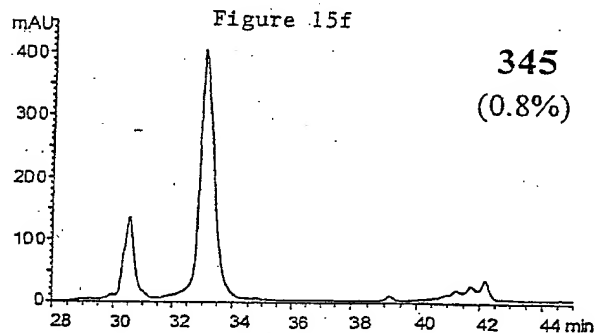


Figure 15g

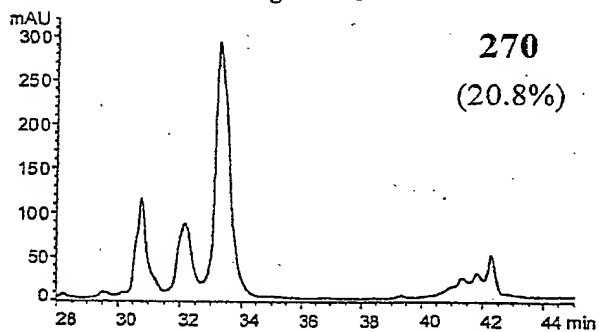


Figure 15d

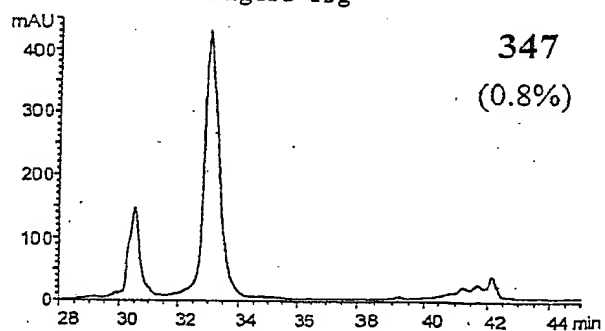


Figure 15h

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201040:98/5E/60

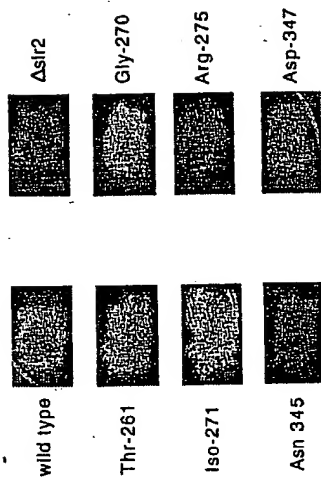


Figure 16b

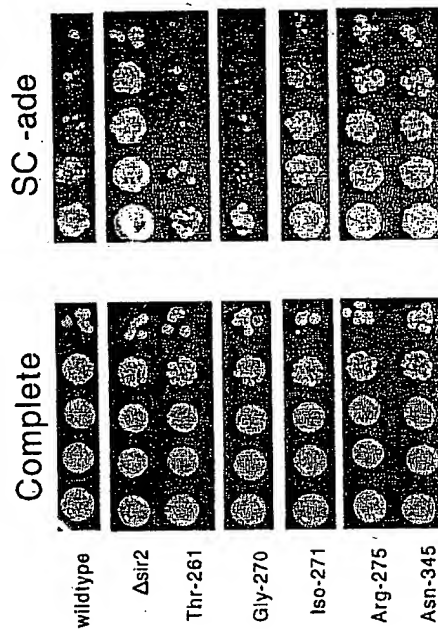


Figure 16d

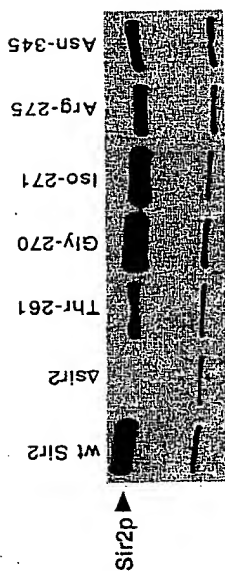


Figure 16a

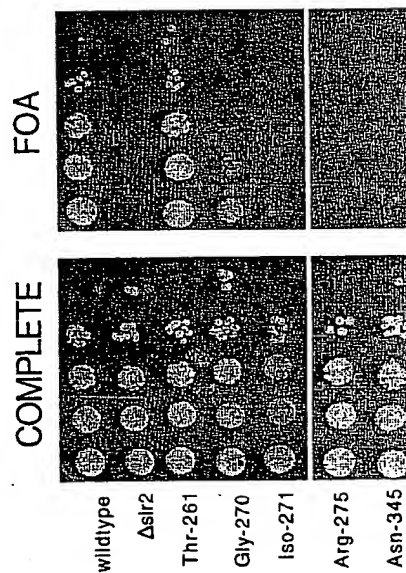


Figure 16c

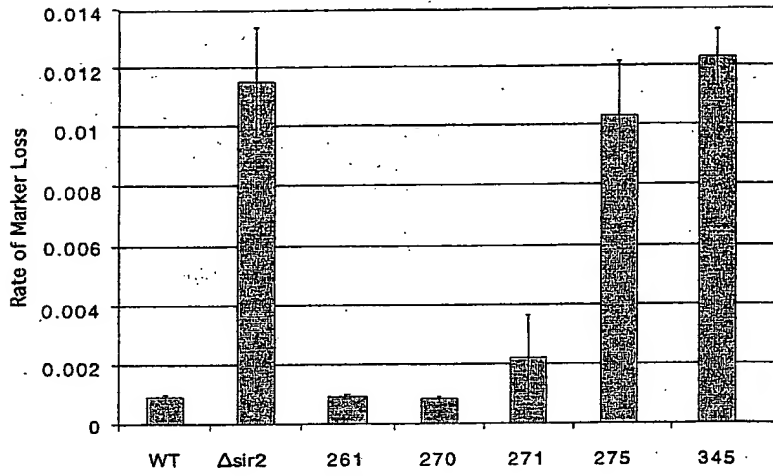


Figure 17a

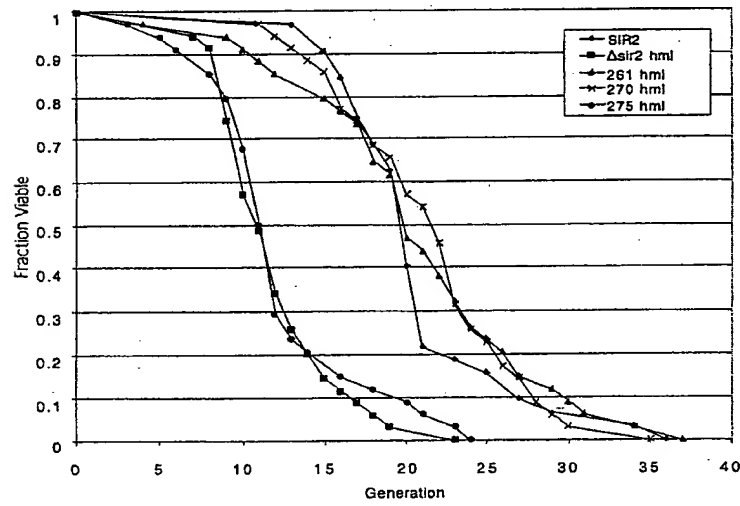


Figure 17b

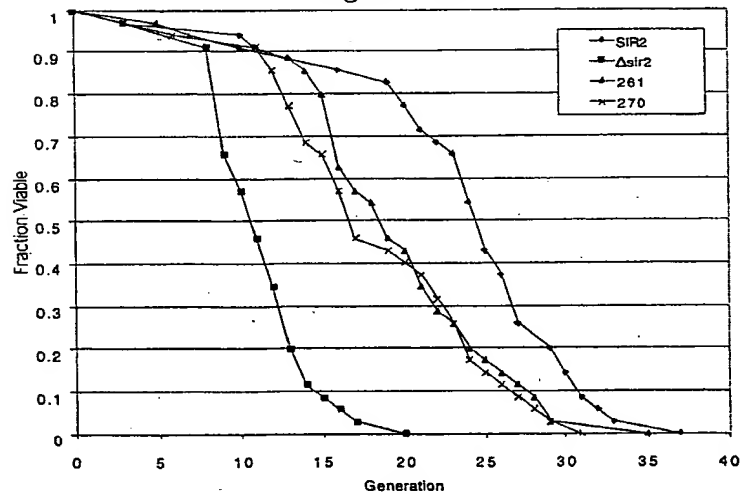


Figure 17c

09735786-040102

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Mutant	ADP-Rib. Activity (% of wt)	Deacetylase Activity (% of wt)	HM Silencing	Telomere Silencing	rDNA Silencing	rDNA Recombi- nation	Mean Life Span (HML+)
sir2Δ	0%	2.7%	-	-	-	1.15%	11.4
wildtype	100%	100%	+	+	+	0.09%	24.4
Thr-261	4%	17%	+	+	+	0.09%	19.8
Gly-270	7%	80%	+	+/-	+	0.08%	18.9
Iso-271	8%	36%	+	-	+/-	0.22%	ND
Arg-275	100%	67%	-	-	-	1.03%	ND
Asn-345	0%	3%	-	-	-	1.22%	ND
Asp-347	0%	3%	-	ND	ND	ND	ND

Figure 18

ySIR2	257	LLVLTGAGVSTSLGIPDFRS	-SEGFYYSKIKH	286
yHST1	203	LLVLTGAGVSTSLGIPDFRS	-SEGFYYSKIRH	232
yHST2	27	VIFMVGAGISTSCGIPDFRS	PQTGLYHNLAR	57
yHST3	55	IACLTGAGISGNAGIPDFRS	-SDGLYDLVKKDC	86
yHST4	95	MVVVSGAGISVAAGIPDFRS	-SEGFISTVNGGS	126
mSIR2alpha	263	LLVLTGAGVSVSCGIPDFRS	-RDGIYARLAVDF	294
mSIR2beta	79	VLCCLVGAGISTSAGIPDFRS	PSTGLYANLEK	109
mSIR2g...	1		-GTRLYSNLQQ	10
AI465098	48	VVFHTGAGISTASGIPDFRG	-PHGVWTMEER	77
AI465820	67	LLVMTGAGISTESGIPDYRS	EKVGLYARTDR	97
AI466061	59	IATISGAGVSAESGVPTFRG	-AGGYWRKWQA	88
ySIR2	287	LGLEDDPQDVFNYNIFMHDPSV	-FYNIANM	314
yHST1	233	LGLEDDPQDVFNLDIFLQDPSV	-FYNIAHM	260
yHST2	58	LKLPYREAVFDVDFQSDPLP	-FYTLAKE	85
yHST3	87	SQYWSIKSGREMEDISLFRDDFKIS	IFAKFMER	119
yHST4	127	GKDLFDYNRVYGDSEMSLKFN	-QLMVSLE	154
mSIR2alpha	295	PDLDPQAMFDIEYFRKDP RP	-FFKFAKE	322
mSIR2beta	110	YHLPYPEAIFEISYFKKHPEP	-FFALAKE	137
mSIR2g...	11	YDIPYPEAIFEELGFFEHNP KP	-FFMLAKE	38
AI465098	78	GLAPKFDTEENA		90
AI465820	98	RPIQ-HIDFVPVLRASG		114
AI466061	89	QDLATPQAFARNPSQVWEFYH	-YRRE	113
ySIR2	315	VLP-PEKITYSPLHSFJKMLQMKGKL	LRNNTQN	345
yHST1	261	VLP-PENMYSPLHSFJKMLQDKGKL	LRNNTQN	291
yHST2	86	LYP-GNFRPSKFHYLLKLFQDKDV	LKRVTQN	116
yHST3	120	LYSNVQLAKPTKTHKFTAHLLKDRNK	LLRCYTQN	152
yHST4	155	RLS-KNCQPTKHEMLNEFARDGRL	LLRLYTQN	185
mSIR2alpha	323	LYP-GQFQPSLGHKFTALSDKEGKL	LRNNTQN	353
mSIR2beta	138	LYP-GQFKPTICHYFRLLEKEGKL	LLRCYTQN	168
mSIR2g...	39	LYP-GHYRPNVTHYFLRLLDHDKEL	LLRLYTQN	69
AI465098	91	-R-PSKTHMALVQLERMGLSFL	VSN	115
AI465820	115	TWP-ENLWAGLNSPLTNPTQHTWL		137
AI466061	114	VMR-SK-EPNPGHLAIAQCEAR		133
ySIR2	346	IDNLESYAGISTD	KL VQ	362
yHST1	292	IDNLESYAGIDPD	KL VQ	308
yHST2	117	IDTLERQAGVKDD	LIJE	133
yHST3	153	IDGLEESIGLTL SNRKLP L TSFSSHWNK	LDVVQ	185
yHST4	186	IDGLD TQLPHLSTN	-VPLAKPIPSTVQ	211
mSIR2alpha	354	IDTLEQVAGIQR	-ILQ	368
mSIR2beta	169	IDTLERVAGLEPQ	DLVE	185
mSIR2g...	70	IDGLERASGIRAS	KLVE	86
AI465098	116	VDGLD VRS GFPRD	KLAE	132
AI465820	0			137
AI466061	0			133

Figure 19

09/35/86-040102

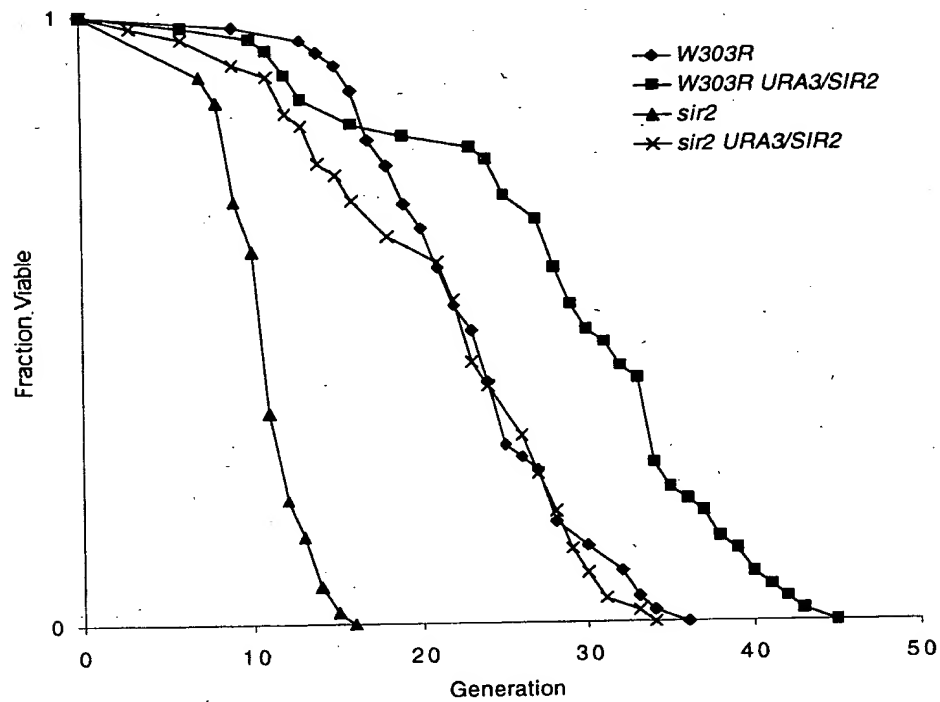


Figure 20

201040-98/55/60

10 20 30 40 50 60
 GCCGAGCAGAGGAGGCGAGGGCGGAGGGCCAGAGAGGCAGTTGGAAGATGGCGGACGAGG
 M A D E V
 70 80 90 100 110 120
 TGGCGCTCGCCCTTCAGGCCGCGGGCTCCCTTCCGCGGCGGCCCATGGAGGCCGCGT
 A L A L Q A A G S P S A A A A M E A A S
 130 140 150 160 170 180
 CGCAGCCGGCGGACGAGCCGCTCCGCAAGAGGCCCCGCGGAGACGGGCTGGCCTCGGGC
 Q P A D E P L R K R P R R D G P G L G R
 190 200 210 220 230 240
 GCAGCCCGGGCGAGCCGAGCGCAGCAGTGGCGCGCGCGCGCGGGGTGTGAGGCGGCGA
 S P G E P S A A V A P A A A G C E A A S
 250 260 270 280 290 300
 GCGCCGCGGCCCCGGCGGCGCTGTGGCGGGAGGCGGCAGGGCGGCGGCGGAGCGCGGAGC
 A A A P A A L W R E A A G A A A S A E R
 310 320 330 340 350 360
 GGGAGGCCCGGCGACGGCCGTGGCCGGGGACGGAGACAATGGGTCCGGCTGCGGCGGG
 E A P A T A V A G D G D N G S G L R R E
 370 380 390 400 410 420
 AGCCGAGGGCGGCTGACGACTTCGACGACGACGAGGGCGAGGAGGAGGACGAGGCGGCGG
 P R A A D D F D D D E G E E E D E A A A
 430 440 450 460 470 480
 CGGCAGCGGCGGCGGCGAGCGATCGGCTACCGAGACAACCTCCTGTTGACCGATGGACTCC
 A A A A A A I G Y R D N L L L T D G L L
 490 500 510 520 530 540
 TCACTAATGGCTTTTCATTCTGTGAAAGTGATGACGATGACAGAACGTCACAGCCAGCT
 T N G F H S C E S D D D D R T S H A S S
 550 560 570 580 590 600
 CTAGTGACTGGACTCCGCGGCGCGGATAGGTCCATATACTTTTGTTCAGCAACATCTCA
 S D W T P R P R I G P Y T F V Q Q H L M
 610 620 630 640 650 660
 TGATTGGCACCAGATCCTCGAACAATTCTTAAAGATTTATTACCAGAAACAATTCCTCCAC
 I G T D P R T I L K D L L P E T I P P P
 670 680 690 700 710 720
 CTGAGCTGGATGATATGACGCTGTGGCAGATTGTTATTAATATCCTTTTCAGAACCAACAA
 E L D D M T L W Q I V I N I L S E P P K
 730 740 750 760 770 780
 AGCGGAAAAAAGAAAAGATATCAATACAATTGAAGATGCTGTGAAGTTACTGCAGGAGT
 R K K R K D I N T I E D A V K L L Q E C
 790 800 810 820 830 840
 GTAAAAAGATAATAGTTCTGACTGGAGCTGGGGTTTCTGTCTCCTGTGGGATTCTGACT
 K K I I V L T G A G V S V S C G I P D F
 850 860 870 880 890 900
 TCAGATCAAGAGACGGTATCTATGCTCGCCTTGCGGTGGACTTCCCAGACCTCCCAGACC
 R S R D G I Y A R L A V D F P D L P D P

Figure 21a

09/35/86-040102

910 920 930 940 950 960
 CTC AAGCCATGTTT GATATTGAGTATTTT TAGAAAAGACCCAAGACCATTCTTCAAGTTTG
 Q A M F D I E Y F R K D P R P F F K F A

970 980 990 1000 1010 1020
 CAAAGGAAATATATCCCGACAGTTCCAGCCGTCTCTGTGTCACAAATTCATAGCTTTGT
 K E I Y P G Q F Q P S L C H K F I A L S

1030 1040 1050 1060 1070 1080
 CAGATAAGGAAGGAAACTACTTCGAAATTATACTCAAATATAGATACCTTGGAGCAGG
 D K E G K L L R N Y T Q N I D T L E Q V

1090 1100 1110 1120 1130 1140
 TTGCAGGAATCCAAAGGATCCTTCAGTGTTCATGGTTCTTTGCAACAGCATCTTGCCTGA
 A G I Q R I L Q C H G S F A T A S C L I

1150 1160 1170 1180 1190 1200
 TTTGTAAATACAAAGTTGATTGTGAAGCTGTTCTGTTGAGACATTTTAAATCAGGTAGTTC
 C K Y K V D C E A V R G D I F N Q V V P

1210 1220 1230 1240 1250 1260
 CTCGGTGCCTTAGGTGCCAGCTGATGAGCCACTTGCCATCATGAAGCCAGAGATTGTCT
 R C P R C P A D E P L A I M K P E I V F

1270 1280 1290 1300 1310 1320
 TCTTTGGTGAAAACCTTACCAGAACAGTTTCATAGAGCCATGAAGTATGACAAAGATGAAG
 F G E N L P E Q F H R A M K Y D K D E V

1330 1340 1350 1360 1370 1380
 TTGACCTCCTCATTTGTTATTGGATCTTCTCTGAAAGTGAGACCAGTAGCACTAATTCCAA
 D L L I V I G S S L K V R P V A L I P S

1390 1400 1410 1420 1430 1440
 GTTCTATACCCCATGAAGTGCCTCAAATATTAATAAATAGGGAACCTTTGCCTCATCTAC
 S I P H E V P Q I L I N R E P L P H L H

1450 1460 1470 1480 1490 1500
 ATTTTGTATGTAGAGCTCCTTGGAGACTGCGATGTTATAATTAATGAGTTGTGTCATAGGC
 F D V E L L G D C D V I I N E L C H R L

1510 1520 1530 1540 1550 1560
 TAGGTGGTGAATATGCCAACTTTGTGTGTAACCTGTAAAGCTTTCAGAAATTACTGAAA
 G G E Y A K L C C N P V K L S E I T E K

1570 1580 1590 1600 1610 1620
 AACCTCCACGCCCACAAAGGAATTGGTTTATTTATCAGAGTTGCCACCAACACCTCTTC
 P P R P Q K E L V H L S E L P P T P L H

1630 1640 1650 1660 1670 1680
 ATATTTTCGGAAGACTCAAGTTACCTGAAAGAACTGTACCACAAGACTCTTCTGTGATTG
 I S E D S S S P E R T V P Q D S S V I A

1690 1700 1710 1720 1730 1740
 CTACACTTGTAGACCAAGCAACAACAATGTTAATGATTTAGAAGTATCTGAATCAA
 T L V D Q A T N N N V N D L E V S E S S

1750 1760 1770 1780 1790 1800
 GTTGTGTGGAAGAAAACCACAAGAAGTACAGACTAGTAGGAATGTTGAGAACATTAAATG
 C V E E K P Q E V Q T S R N V E N I N V

1810 1820 1830 1840 1850 1860
 TGGAAAATCCAGATTTTAAGGCTGTTGGTTCCAGTACTGCAGACAAAATGAAAGAAGCTT
 E N P D F K A V G S S T A D K N E R T S

1870 1880 1890 1900 1910 1920
 CAGTTGCAGAAACAGTGAGAAAATGCTGGCCTAATAGACTTGCAAAGGAGCAGATTAGTA
 V A E T V R K C W P N R L A K E Q I S K

Figure 21b

09/35/86-040102

1930 1940 1950 1960 1970 1980
 AGCGGCTTGAGGGTAATCAATACCTGTTTGTACCACCAAATCGTTACATATTCCACGGTG
 R L E G N Q Y L F V P P N R Y I F H G A

1990 2000 2010 2020 2030 2040
 CTGAGGTATACTCAGACTCTGAAGATGACGTCTTGTCTCTAGTTTCTGTGGCAGTAACA
 E V Y S D S E D D V L S S S S C G S N S

2050 2060 2070 2080 2090 2100
 GTGACAGTGGCACATGCCAGAGTCCAAGTTTAGAAGAACCCTTGAAGATGAAAGTGAAA
 D S G T C Q S P S L E E P L E D E S E I

2110 2120 2130 2140 2150 2160
 TTGAAGAATTCTACAATGGCTTGAAGATGATACGGAGAGGCCCGAATGTGCTGGAGGAT
 E E F Y N G L E D D T E R P E C A G G S

2170 2180 2190 2200 2210 2220
 CTGGATTTGGAGCTGATGGAGGGGATCAAGAGGTTGTTAATGAAGCTATAGCTACAAGAC
 G F G A D G G D Q E V V N E A I A T R Q

2230 2240 2250 2260 2270 2280
 AGGAATTGACAGATGTAAACTATCCATCAGACAAATCATAACACTATTGAAGCTGTCCGG
 E L T D V N Y P S D K S *

2290 2300 2310 2320 2330 2340
 ATTCAGGAATTGCTCCACCAGCATTTGGGAACCTTTAGCATGTCAAAAAAATGAATGTTTAC

2350 2360 2370 2380 2390 2400
 TTGTGAACCTTGAACAAGGAAATCTGAAAGATGTATTATTTATAGACTGGAAAATAGATTG

2410 2420 2430 2440 2450 2460
 TCTTCTTGGATAATTTCTAAAGTTCCATCATTTCTGTTTGTACTTGTACATTCAACACTG

2470 2480 2490 2500 2510 2520
 TTGGTTGACTTCATCTTCTTTCAAGGTTTCAATTTGTATGATACATTTCGTATGTATGTATA

2530 2540 2550 2560 2570 2580
 ATTTTGTTTTTTGGCCTAATGAGTTTCAACCTTTTAAAGTTTTCAAAGCCATTGGAAATGT

2590 2600 2610 2620 2630 2640
 TAATGTAAAGGGAACAGCTTATCTAGACCAAAGAATGGTATTTTACACTTTTTTGTGTTGT

2650 2660 2670 2680 2690 2700
 AACATTGAATAGTTTAAAGCCCTCAATTTCTGTTCTGCTGAACTTTTATTTTTAGGACAG

2710 2720 2730 2740 2750 2760
 TTAACTTTTTAAACACTGGCATTTTCCAAAACCTTGTGGCAGCTAACTTTTTTAAATCACA

2770 2780 2790 2800 2810 2820
 GATGACTTGTAAATGTGAGGAGTCAGCACCGTGTCTGGAGCACTCAAAACCTTGGGCTCAGT

2830 2840 2850 2860 2870 2880
 GTGTGAAGCGTACTTACTGCATCGTTTTTGTACTTGTCTGCAGACGTGGTAATGTCCAAAC

2890 2900 2910 2920 2930 2940
 AGGCCCCTGAGACTAATCTGATAAATGATTTGGAAATGTGTTTCAGTTGTTCTAGAAACA

2950 2960 2970 2980 2990 3000
 ATAGTGCCTGTCTATATAGGTCCCCTTAGTTTGAATATTTGCCATTGTTTAATTAAATAC

3010 3020 3030 3040 3050 3060
 CTATCACTGTGGTAGAGCCTGCATAGATCTTCACCACAAATACTGCCAAGATGTGAATAT

3070 3080 3090 3100 3110 3120
 GCAAAGCCTTTCTGAATCTAATAATGGTACTTCTACTGGGGAGAGTGAATATTTGGAC

3130 3140 3150 3160 3170 3180
 TGCTGTTTTTCCATTAAATGAGGAAAGCAATAGGCCTCTTAATTAAAGTCCCAAAGTCATA

Figure 21c

09/35/86.040102

3190 3200 3210 3220 3230 3240
AGATAAATTGTAGCTCAACCAGAAAGTACACTGTTGCCTGTTGAGGATTTGGTGTAAATGT

3250 3260 3270 3280 3290 3300
ATCCCAAGGTGTTAGCCTTGTATTATGGAGATGAATACAGATCCAATAGTCAAATGAAAC

3310 3320 3330 3340 3350 3360
TAGTTCCTTAGTTATTTAAAAGCTTAGCTTGCCCTAAAACTAGGGATCAATTTTCTCAACT

3370 3380 3390 3400 3410 3420
GCAGAAACTTTTAGCCTTTCAAACAGTTCACACCTCAGAAAGTCAGTATTTATTTTACAG

3430 3440 3450 3460 3470 3480
ACTTCTTTGGAACATTGCCCCCAAATTTAAATATTCATGTGGGTTTAGTATTTATTACAA

3490 3500 3510 3520 3530 3540
AAAAATGATTTGAAATATAGCTGTTCTTTATGCATAAAATACCCAGTTAGGACCATTACT

3550 3560 3570 3580 3590 3600
GCCAGAGGAGAAAAGTATTAAGTAGCTCATTTCCCTACCTAAAAGATAACTGAATTTATT

3610 3620 3630 3640 3650 3660
TGGCTACACTAAAGAATGCAGTATATTTAGTTTTCCATTTGCATGATGTGTTTGTGCTAT

3670 3680 3690 3700 3710 3720
AGACAATATTTTAAATTGAAAAATTTGTTTTAAATTATTTTACAGTGAAGACTGTTTTTC

3730 3740 3750 3760 3770 3780
AGCTCTTTTTATATTGTACATAGACTTTTATGTAATCTGGCATATGTTTTGTAGACCGTT

3790 3800 3810 3820 3830 3840
TAATGACTGGATTATCTTCCTCCAACCTTTGAAATACAAAAACAGTGTTTTTATACTAAAA

3850 3860 3870
AAAAAAAAAAGTCGACGCGGCCGCGAATTC

Figure 21d

09735786-040102

09735786-040102

10 20 30 40 50 60
CCACGCGTCCGCGGACGCGTGGGCACGGGACAGAGCAGTCGGTGACAGTCCCGAGGGCCCC
T R P R T R G H G T E Q S V T V P R A P

70 80 90 100 110 120
CCACCCCGTTCCCATGGCCGAGCCGGACCGATTTCAGACTCGGACACTGAGGGAGGAGCCA
T P F P W P S R T D S D S D T E G G A T

130 140 150 160 170 180
CTGGTGGAGAGGCAGAGATGGACTTCCTGAGGAATTTATTACCCAGACCCTGGGCCTGG
G G E A E M D F L R N L F T Q T L G L G

190 200 210 220 230 240
GTTCCCAAAGGAGCGTCTTCTAGACGAGCTGACCCTCGAAGGAGTGACACGCTACATGC
S Q K E R L L D E L T L E G V T R Y M Q

250 260 270 280 290 300
AGAGCGAGCGCTGCCGCAAGGTCATCTGTTTGGTGGGAGCCGGAATCTCCACGTCCGCGG
S E R C R K V I C L V G A G I S T S A G

310 320 330 340 350 360
GTATCCCTGACTTCCGCTCCCCGTCCACTGGCCTCTATGCAAACCTGGAGAAGTACCACC
I P D F R S P S T G L Y A N L E K Y H L

370 380 390 400 410 420
TTCCTTACCCAGAGGCCATCTTTGAGATCAGCTACTTCAAGAAACATCCGGAACCCCTTCT
P Y P E A I F E I S Y F K K H P E P F F

430 440 450 460 470 480
TTGCCCTTGCCAAGGAGCTCTATCCCGGGCAGTTCAAGCCAACCATCTGCCACTACTTCA
A L A K E L Y P G Q F K P T I C H Y F I

490 500 510 520 530 540
TCCGCCTGCTGAAGGAGAAGGGGCTGCTGCTGCTGCTACACGCAGAACATAGACACGC
R L L K E K G L L L R C Y T Q N I D T L

550 560 570 580 590 600
TGGAACGAGTGCGGGGCTGGAGCCCCAGGACCTGGTGGAGGGCCACGGCACCTTCTACA
E R V A G L E P Q D L V E A H G T F Y T

610 620 630 640 650 660
CATCACACTGTGTCAACACCTCCTGCAGAAAAGAATACACGATGGGCTGGATGAAAGAGA
S H C V N T S C R K E Y T M G W M K E K

670 680 690 700
AGATTTCTCAGAAGCAACTCCCAGGTGTGAGCAGTGTCA
I S Q K Q L P G V S S V

Figure 22

201040" 98/5E/60

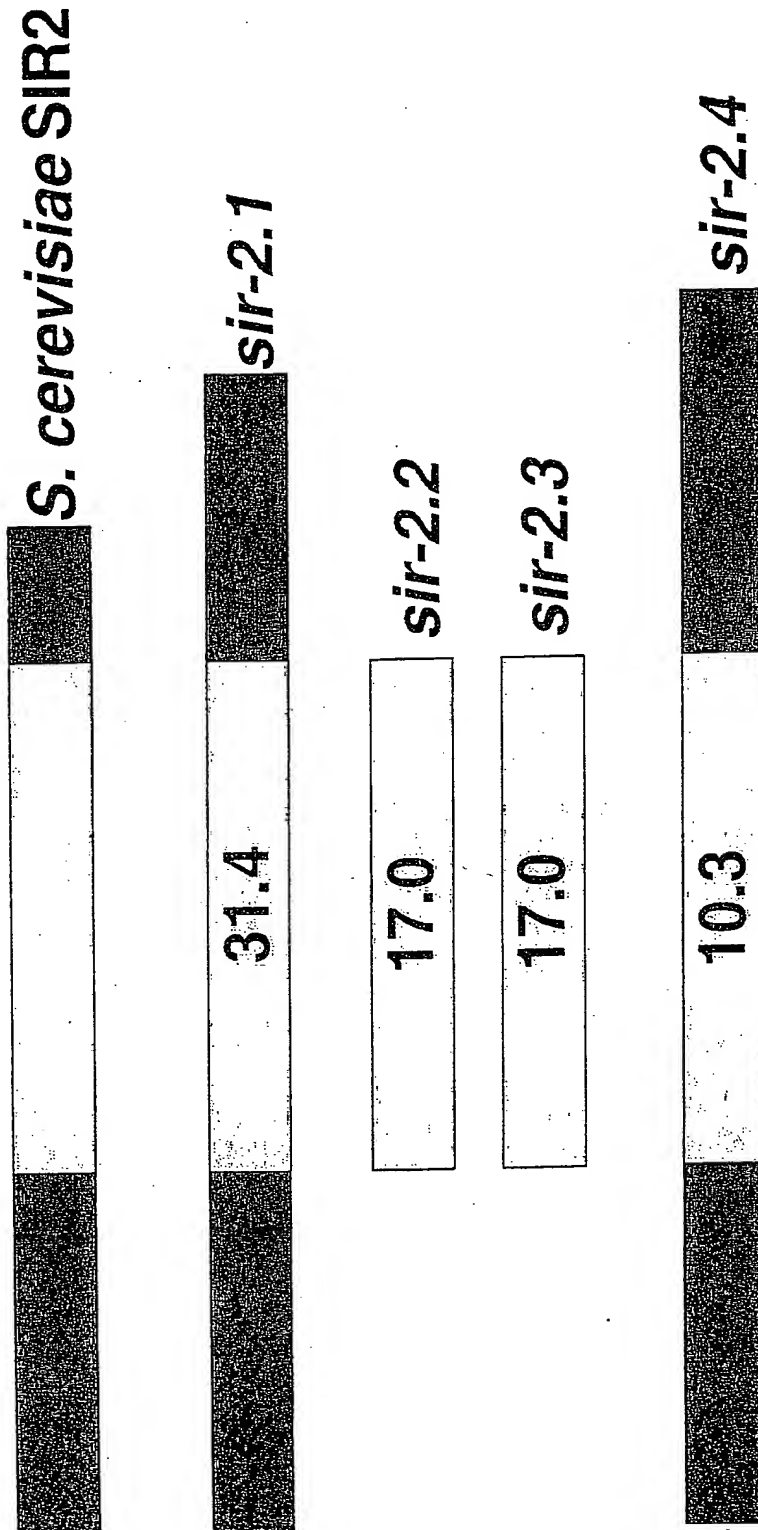


Figure 23

Figure 24A

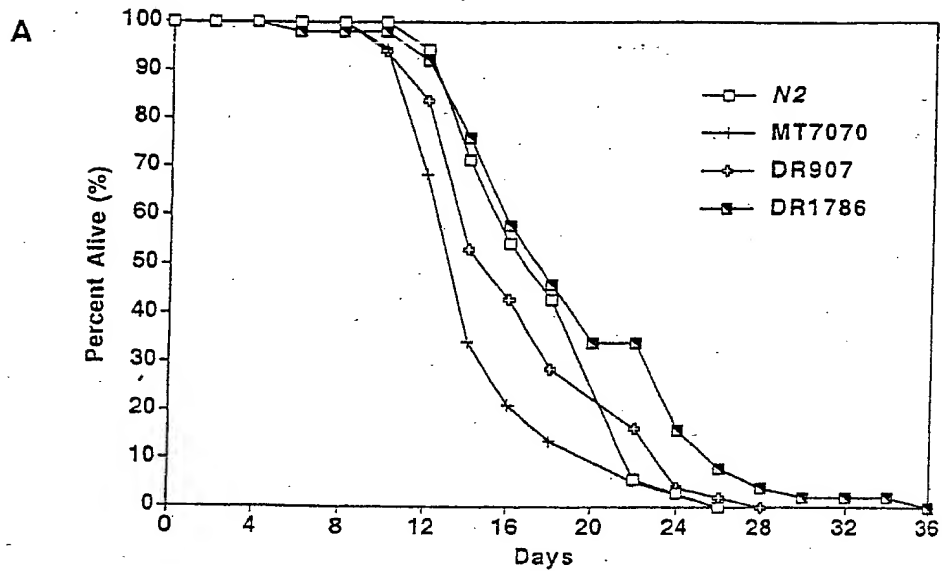


Figure 24B

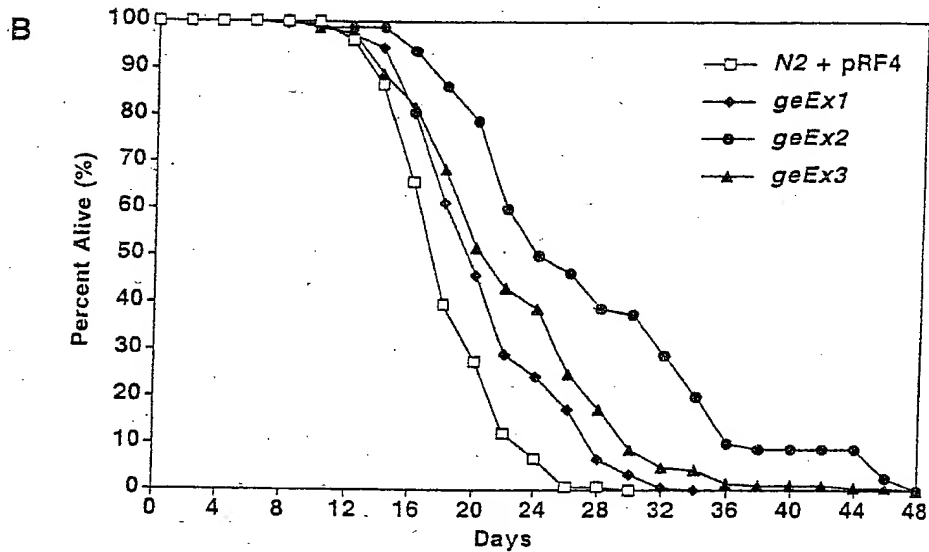


Figure 24C

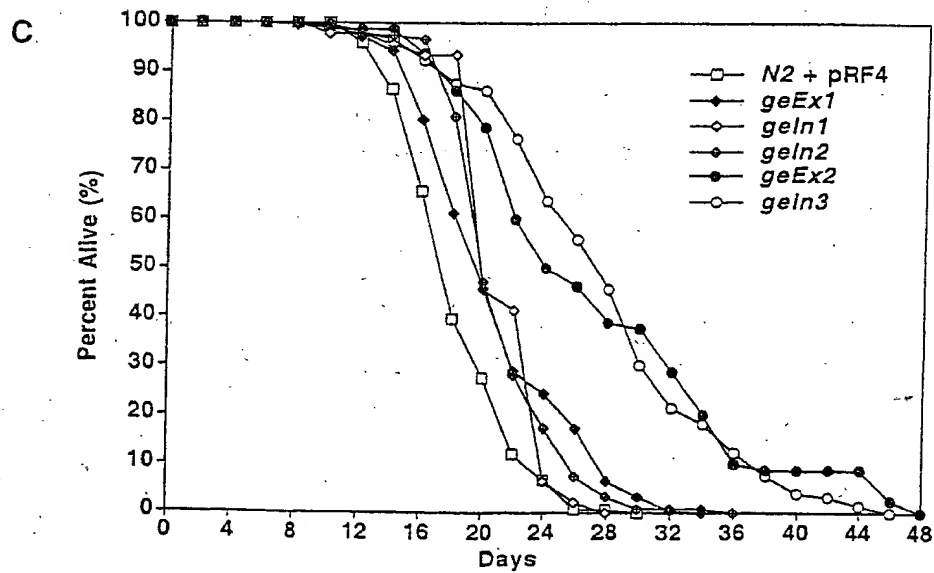


Figure 25A

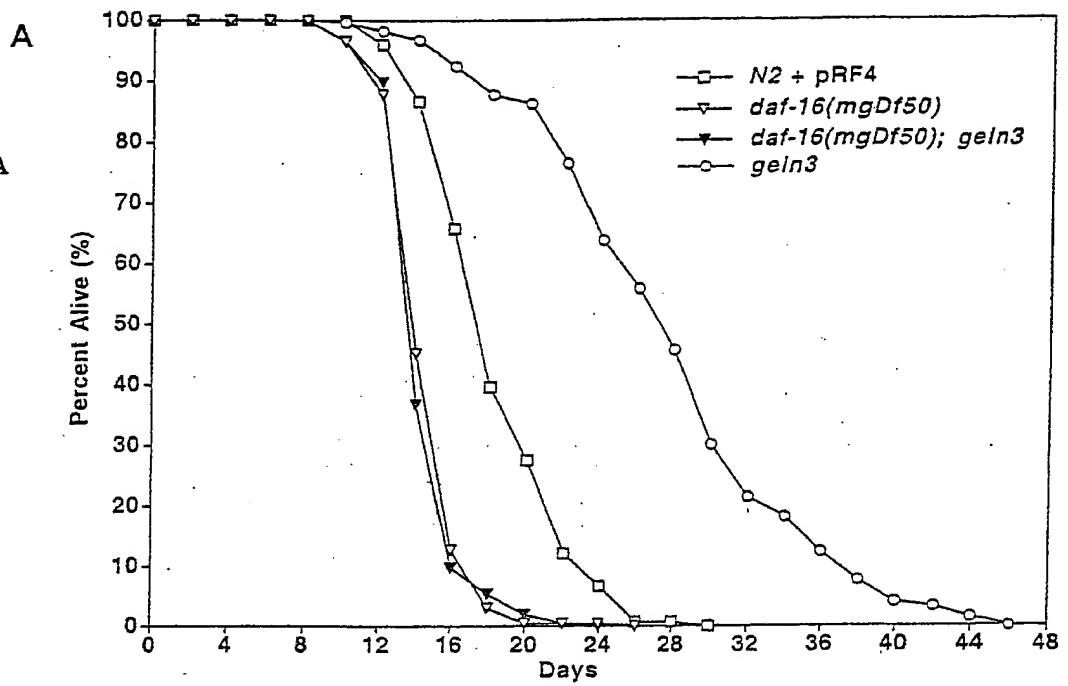


Figure 25B

